

Abstract

Highly scratch-resistant multicoat clearcoat systems and multicoat systems comprising them for primed or 5 unprimed substrates are producible by

- (1) applying at least one clearcoat film I of a coating material I curable thermally and with actinic radiation to the surface of the substrate, 10 or wet-on-wet to the surface of a basecoat film III, and partially curing it, and
- (2) applying a further clearcoat film II of a coating material II curable with actinic radiation and 15 also, if desired, thermally, comprising nanoparticles, to the surface of the clearcoat film(s) I, and then
- (3) curing the clearcoat films I and II and also, if 20 appropriate, the basecoat film III conjointly with actinic radiation and thermally.

In an alternative embodiment, the clearcoat films I may if desired be cured fully with actinic radiation and 25 thermally together with the basecoat films III, after which the outer surface of the clearcoats I is roughened, coated with the clearcoat film II, which is cured with actinic radiation and also, if desired, thermally.